

Claim 42 has been amended into proper format for a method claim according to U.S. practice.

3. Restriction

The Examiner has required a restriction between the claims of Group I (claims 1-7) and Group II (claims 8-41). In response thereto, Applicants provisionally elect to prosecute the claims of Group II, that is process claims 8-41.

Favorable action and early allowance of all the claims are earnestly solicited.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicant respectfully petitions for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope to: Commissioner of Patents and Trademarks, Washington

D.C. 20231 on: October 30, 2001
(Date of deposit)

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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October 30, 2001
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Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The paragraph beginning on page 8, line 34, has been amended as follows:

Examples of suitable catalyst systems are described in, for example, [Finnish Patent Nos. 86866, 96615 and 88047 and 88048] US 5,234,879, EP 0 627 449 and WO 92/19653, WO 92/19658 and WO 92/19659.

The paragraph beginning on page 8, line 36, has been amended as follows:

One particularly preferable catalyst, which can be used in the present invention, is disclosed in [FI Patent No. 88047] WO 92/19653. Another preferred catalyst is disclosed in [Finnish Patent Application No. 963707] WO 98/12234.

The paragraph beginning on page 11, line 32, has been amended as follows:

The catalyst can be prepolymerized prior to feeding into the polymerization reactor. During prepolymerization the catalyst components are contacted for a short period with a monomer, such as an olefin monomer, before feeding into the reactor. Examples of suitable systems are described in, e.g., Finnish Patent Application No. 961152. It is also possible, as described in [Finnish Patent No. 95387] EP 0 607 703, to carry out the prepolymerization in the presence of a viscous substance, such as an olefinic wax or an oil/wax mixture, to provide a prepolymerized catalyst which is stable during storage and handling. The catalysts prepolymerized in wax will also allow for easy dosing of the catalyst into the polymerization reactors.

The paragraph beginning on page 21, line 24, has been amended as follows:

The polymerizations were carried out in the presence of a Ziegler-Natta catalyst with an external electron donor corresponding to the general formula I and V above (dicyclopentyl

dimethoxy silane, in the following abbreviated "D"). The catalyst was prepared according to the method described in [FI Patent No. 88047] WO 92/19653. A polymer prepared in the presence of a corresponding catalyst system containing a conventional donor corresponding to the general formula IV (cyclohexyl methyl dimethoxy silane or abbreviated "C") was tested. As a reference, a commercial polypropylene was used. Polymerizations were made in liquid propylene where the first polymerization step was made without any hydrogen in the feed and the second step in the presence of hydrogen.

The paragraph beginning on page 23, line 16, has been amended as follows:

A prepolymerized $MgCl_2$ supported Ti-catalyst (prepared according to [FI Patent No. 88047] WO 92/19653) was used in the polymerization. The cocatalyst was triethyl aluminium (TEA) and dicyclopentyl dimethoxy silane (DCPDMS) was used as an external donor. The Al/Ti mole ratio was 150 and Al/donor mole ratio 5.

In the Claims:

The claims have been amended as follows:

8. (Amended) A process for preparing linear high melt strength propylene homopolymers and copolymers, exhibiting a melt-strength of at least 2.5 g, determined by the haul-off, comprising the steps of

- subjecting propylene and optionally other olefins to polymerization in a plurality of polymerization reactors connected in series,
- employing different amounts of hydrogen as a molar mass modifier in at least two of the reactors, and
- carrying out the polymerization reaction in the presence of a catalyst system capable of catalyzing the formation of a high molar mass polymerization product having a MFR_2 of less than 0.1 g/10 min and a low or medium molar mass polymerization product having a MFR_2 of more than 0.5 g/10 min.

17. (Twice Amended) The process according to claim [1] 8, wherein 5 to 50 % of the propylene homopolymer or copolymer has a MFR₂ < 0.1 g/10 min and 50 to 95 % of the propylene homopolymer or copolymer has a MFR₂ > 0.5 g/10 min.

18. (Twice Amended) The process according to claim [1] 8, wherein said reactors are selected from the group of loop reactors and gas phase reactors.

21. (Twice Amended) The process according to claim [1] 8, wherein ethylene is fed into the reactor in which the higher molar mass component is produced in order to increase reactivity and molar mass of the component.

22. (Twice Amended) The process according to claim [1] 8, which comprises the steps of

- subjecting propylene and optionally other olefins to a first polymerization or copolymerization reaction in a first reaction zone,
- recovering the first polymerization product from the first reaction zone,
- feeding the first polymerization product to a second reaction zone,
- feeding additional propylene to the second reaction zone,
- subjecting the additional propylene to a second polymerization reaction in the presence of the first polymerization product to produce a second polymerization product, and
- recovering the second polymerization product from the second reaction zone, and
- separating and recovering the polypropylene from the second reaction product.

28. (Twice Amended) The process according to claim [1] 8, wherein the second reactor is a gas phase reactor, wherein propylene and optionally comonomers are polymerized in a gaseous reaction medium.

41. (Twice Amended) A product prepared by a process according to claim [1] 8, which is nucleated for higher crystallization temperature, stiffness and optical properties.

42. (Twice Amended) A method for manufacturing [Use of a homopolymer or copolymer according to claim 1 or a polymer product according to claim 5 for the manufacture of] polymer foams, thermoformed and foamed products, films and sheets, and products [prepared] by blow molding, stretch blow molding, injection moulding or calendering a homopolymer or copolymer according to claim 1 or a polymer product according to claim 5.